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10/712,870	11/12/2003	Timothy Addington	43314/270278	2303

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EXAMINER

SALCE, JASON P

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,870

Applicant(s)

ADDINGTON ET AL.

Examiner

Jason P. Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-130 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-130 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/4/2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-19, 21-38 and 41-130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donlan et al. (U.S. Patent Application Publication 2004/0088737) in view of McKeown et al. (U.S. Patent Application Publication 2004/0261116) in further view of Makofka et al. (U.S. Patent Application Publication 2002/0112175).

Referring to claim 1, Donlan discloses a processor (see processor 207 (Figure 3) in ITV Provisioning Manager 104 in Figure 1) capable of receiving provisioning data using a first interface (see Paragraph 0046 and Paragraph 0064, Lines 1-6 for receiving provisioning data from a billing system 114 confirming that a subscriber has paid an

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overdue bill), the provisioning data including a service identifier (see Paragraph 0046 for the data messages containing provisioning-related information including customer order registration codes) and a subscriber identifier (see Paragraph 0046 for the data messages containing provisioning-related information including client device unit addresses), the processor capable of retrieving a host file using a second interface (see Paragraph 0041, Lines 7-10 for the data storage 228 (connected to second interface 226) containing an ORACLE data base, which serves as the source of providing customer (host) account and service profiles) and deriving a host-specific provisioning message using the host file (see Paragraph 0065, Lines 7-14 and Paragraph 0066 for creating an update set-top box response message 508, which is derived from the processing of the update set-top box request in Figure 7), the processor capable of transmitting the host-specific provisioning message using a third interface operatively connected to a digital communication network (see Paragraph 0066 for transmitting the update set-top box message 508 to the customer service center 122, which is connected to the digital communication network 130 and 108 in Figure 1) wherein the digital communication network is further connected to a host (see Paragraph 0031 for Headend 130 connected the hosts).

Donlan also discloses a memory storage (database 228 in Figure 3) operatively connected to the second interface (data storage interface 226), capable of storing the host file (see Paragraph 0043), the host file associated with both a host type (see device type 334) and a service identifier (see service type 358), the memory storage further capable of storing an association between a host address and the host type (see

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device type 334 associated with the subscriber address 316 by being stored in the database 228), the memory storage further capable of providing the host file to the processor in response to a request from the processor (see Paragraph 0041 and Paragraph 0065 for providing host file data to the processor to process a subscribers request to reactivate his/her account).

Donlan fails to specifically teach transmitting a provisioning message to a host. The system, although discloses a set-top box, does not get into the specifics of receiving provisioning messages from the provisioning system, because the patent is exclusively used to teach the logistics of the provisioning system before the headend.

McKeown discloses at Paragraph 0077 a provisioning sequence used to allow "end-to-end" provisioning of a user device. Paragraph 0084 describes determining parameters automatically by querying the user device itself. Paragraph 0142 discusses remotely reconfiguring the user access device to modify a characteristic of the service delivered. And finally, Paragraph 0154 discusses dynamically assigning addresses to end user devices, which is related to the section cited by the examiner in the previous Office Action (Paragraph 0283). The examiner notes that Paragraphs 0274-0283 describe the dynamic assignment of IP addresses provisioned to end user devices through the well-known DHCP protocol. Therefore, McKeown teaches multiple types of provisioning messages sent to the client.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the provisioning system, as taught by Donlan, by transmitting the provisioning message to the host, as taught by McKeown, for the

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purpose of enabling different procedures for different versions of the same type of device to be accommodated (see Paragraph 0098 of McKeown).

Although Donlan discloses that the host file comprises a protocol file containing host-specific information configuration information/commands (see Paragraph 0043 for the database 228 further comprising subscriber device, subscriber device properties and device type information), Donlan fails to disclose that the processor derives the host-specific provisioning message using such data.

Makofka discloses a server (MSO) which contains a processor that derives a host-specific provisioning message based on a protocol file containing host-specific commands (see Paragraphs 0081-0086 for dividing the set top box functionality into functional units (protocol file information) and assigning information to the functional unit (thereby creating the provisioning message) that will allow a client to access certain functions of the client device based on the information assigned to each functional unit (therefore teaching that the processor derives the host-specific provisioning message based on protocol (client device) information that contains host-specific commands (what functional units are available to be accessed))).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the provisioning system host file, as taught by Donlan and McKeown, using the protocol file information (information about the client devices functionality) that is used for creating additional provisioning message information, as taught by Makofka, for the purpose of allowing authorization of functional units (client device functionality) to be controlled in a flexible way (see Paragraph 0090 of Makofka).

Referring to claim 2, Donlan discloses that the provisioning data received using the first interface is from a billing system (see Paragraph 0046 for receiving provisioning related information from components 104-166 in Figure 1, which includes billing system 114 in Figure 1).

Referring to claim 3, Donlan discloses that the service identifier is a billing code (see Paragraph 0046 for the provisioning data including billing system identification numbers and customer order registration codes).

Referring to claim 4, Donlan discloses that the provisioning data received using the first interface is from a provisioning input system (see Paragraph 0038, Lines 1-4 for also receiving provisioning information from the customer service center 112 in Figure 1).

Referring to claim 5, Donlan discloses that the host-specific provision message is derived (by the processor) dynamically using a service parameter data file associated with the service identifier (see Paragraph 0065, Lines 1-7 for determining whether the transaction (which is identified by a service (reactivate) identifier) is valid using various service parameter data and if the transaction is valid the host-specific provision message is derived and sent to the customer service center 122 and/or the billing system 114 (see Paragraph 0066)).

Referring to claim 6, Donlan discloses that the processor derives the host-specific provisioning message statically by extracting the host-specific provisioning message from the host file (see Paragraph 0065, Lines 7-14 and Paragraph 0066 for creating an update set-top box response message 508, which is derived from the processing of the update set-top box request in Figure 7).

Referring to claim 7, Donlan discloses that the digital communication network is a cable service network (see Paragraph 0040).

Referring to claim 8, Donlan discloses that the host is integrated in a digital television (see Paragraphs 0030-0031).

Referring to claim 9, Donlan, McKeown and Makofka discloses all of the limitations in claim 1, as well as host type data (see Paragraph 0046), but fails to teach that host type data is associated with a host manufacturer and a host model of the host manufacturer.

McKeown also discloses a provisioning system similar to Donlan, but further defines that equipment type information further includes manufacturer and model information (see Paragraph 0098).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the device type information, as taught by Donlan, using



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the manufacturer and model information, as taught by McKeown, for the purpose of enabling different procedures for different versions of the same type of device to be accommodated (see Paragraph 0098 of McKeown).

Referring to claim 10, Donlan discloses that the system processes IP data over a network (see Paragraph 0011) as well as MAC addresses (see Paragraph 0046).

Referring to claim 11, Donlan discloses that the request from the processor to the memory storage includes the host address (see Paragraph 0046 for communicating customer order registration codes) and the service identifier (see Paragraph 0046 for communicating customer order registration codes).

Referring to claim 12, Donlan discloses that the request from the processor to the memory storage includes a subscriber identifier comprising a host identifier (see Paragraph 0046 for a subscriber identifier comprising a MAC address).

Referring to claim 13, Donlan discloses a table (database 228) associating (by storing both entities) a subscriber identifier (subscriber device 332) to a host address (see Paragraph 0043 for a subscriber address 316).

Referring to claim 14, Donlan discloses a table (database 228) associating (by storing both entities) a subscriber identifier (subscriber device 332) to a host type (see Paragraph 0043 for a device type 334).

Referring to claim 15, Donlan discloses that the third interface is connected to a cable headend and the headend is connected to the digital communication network (see Figure 1 for headend 130 connected to network 108).

Referring to claim 16, Donlan discloses an IP network and the transmission of IP addresses across the network (see Paragraph 0046). Therefore, the system would inherently transmit host-specific messages using the host address as a destination address for the host-specific message in order to transmit the data to the proper location.

Referring to claim 17, Donlan discloses that the service identifier (Suspend or Reactivate the subscriber) results in the provision message configuring an enhanced cable service (see Paragraphs 0064-0070 for configuring the system based on a reactivation message).

Referring to claim 18, Donlan, McKeown and Makofka disclose all of the limitations in claim 1, but fail to teach that the host-specific provisioning message is

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transmitted to the host on the digital communication network using an out-of-band channel.

McKeown discloses transmitting provisioning messages in an out-of-band channel (see Paragraph 0422).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the transmission channel, as taught by Donlan, using the out-of-band channel to transmit provisioning messages, as taught by McKeown, for the purpose of avoiding significant problems with the existing signal path used to launch one or more provisioning messages (test or control signals) (see Paragraph 0422 of McKeown).

Claim 19 directly relates to claim 18, where instead of an out-of-band channel, McKeown also teaches the use of a DOCSIS based channel (see Paragraph 1186).

Referring to claim 21, Donlan discloses a service identifier (see Paragraph 0043 for a subscriber services identifier 344 and Figure 1 for one of the services being access to the Internet through a Web Server 158).

Referring to claim 22, see the rejection of claim 1 and note that Donlan further discloses an activation message (see Paragraph 0049).

Donlan fails to specifically teach transmitting a provisioning message to a host using a second interface. The system, although discloses a set-top box, does not get

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into the specifics of receiving provisioning messages from the provisioning system, because the patent is exclusively used to teach the logistics of the provisioning system before the headend.

McKeown discloses transmitting the provisioning message to a host (access device) at Paragraph 0283.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the provisioning system, as taught by Donlan, by transmitting the provisioning message to the host, as taught by McKeown, for the purpose of enabling different procedures for different versions of the same type of device to be accommodated (see Paragraph 0098 of McKeown).

Although Donlan discloses that the host file comprises a protocol file containing host-specific information configuration information/commands (see Paragraph 0043 for the database 228 further comprising subscriber device, subscriber device properties and device type information), Donlan fails to disclose that the processor derives the host-specific provisioning message using such data.

Makofka discloses a server (MSO) which contains a processor that derives a host-specific provisioning message based on a protocol file containing host-specific commands (see Paragraphs 0081-0086 for dividing the set top box functionality into functional units (protocol file information) and assigning information to the functional unit (thereby creating the provisioning message) that will allow a client to access certain functions of the client device based on the information assigned to each functional unit (therefore teaching that the processor derives the host-specific provisioning message

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based on protocol (client device) information that contains host-specific commands (what functional units are available to be accessed)).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the provisioning system host file, as taught by Donlan and McKeown, using the protocol file information (information about the client devices functionality) that is used for creating additional provisioning message information, as taught by Makofka, for the purpose of allowing authorization of functional units (client device functionality) to be controlled in a flexible way (see Paragraph 0090 of Makofka).

Claim 23 corresponds to claim 22, where Donlan teaches that the activation message is received from a host (see Paragraph 0048), and that the activation message further includes a host identifier (see Paragraph 0048 for sending a request from the host and Paragraph 0046 for the messages containing IP addresses, which would inherently be used to know where to send provisioning data back to the client device that requested the service).

Claim 24 corresponds to claim 23, where Donlan further discloses a host type identifier in Paragraph 0046 (client device unit addresses).

Referring to claim 25, see the rejection of claim 23.

Claim 26 corresponds to claim 22, where Donlan discloses that the activation message includes a reference number identifying a previously indicated provisioning transaction (see Paragraph 0046 for customer order registration codes).

Claim 27 corresponds to claim 22, where Donlan teaches that the host file contains legacy-based configuration (see Paragraph 0043 for subscriber device properties 336).

Claim 28 corresponds to claim 22, where Donlan teaches a host-specific configuration message (see Paragraph 0043 for subscriber device properties 336).

Referring to claim 29, see the rejection of claim 9.

Referring to claim 30, see the rejection of claim 22 and further note that Donlan teaches a cable network (Paragraph 0040).

Referring to claim 31, see the rejection of claims 22 and 30.

Referring to claim 32, see the rejection of claim 18.

Referring to claim 33, see the rejection of claim 19.

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Claim 34 corresponds to claim 22, where Donlan discloses that the host type is determined using a host identifier in the activation message (see the rejection of claims 23 and 24).

Referring to claim 35, see the rejection of claims 4-5.

Claim 36 corresponds to claim 22, where Donlan discloses that the provisioning message configures a digital video programming service on a cable network (see the rejection of claim 17).

Claim 37 corresponds to claim 22, where Donlan discloses that the provisioning message is an enhanced services configuration message (see the rejection of claim 17).

Claim 38 corresponds to claim 22, where Donlan discloses a billing system (see the rejection of claim 2) that is connected to the process capable of receiving a second provisioning message (see billing system 114 connected to the IP Provisioning System 110 in Figure 1) comprising a host address and an indication that the provisioning message was transmitted to the host (see Paragraphs 0064-0070 for the process of reactivating a subscriber using provisioning messages (which contains the user's IP address and transmission indications taught at Paragraph 0046)).

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Claim 41 corresponds to claim 22, where Donlan teaches reactivating a subscriber at the provisioning system (see Paragraphs 0064-0070), thereby allowing a user to receiver (and decode at the set-top box) video signals. Note that Donlan teaches a provisioning system for an interactive TV cable system (see Paragraph 0012).

Claim 42 corresponds to claim 22, where Donlan discloses that the provisioning message enables the host to receive data from the Internet (see Paragraph 0027).

Referring to claim 43, see the rejection of claim 8.

Referring to claim 44, see Paragraph 0030 and Figure 2 of Donlan.

Referring to claims 45-130, see the rejection of claims 22-44.

3. Claims 20 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donlan et al. (U.S. Patent Application Publication 2004/0088737) in view of McKeown et al. (U.S. Patent Application Publication 2004/0261116) in further view of Makofka et al. (U.S. Patent Application Publication 2002/0112175) in further view of Poli et al. (U.S. Patent Application Publication 2002/0178455).



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Referring to claim 20, Donlan, McKeown and Makofka disclose all of the limitations in claim 1, but fail to teach receiving message commands to tune the host to an indicated channel to receive additional provisional messages.

Poli discloses for receiver to tune to an alternate channel to receive more provisioning messages (see Paragraph 0028 and 0034 for a receiver being forced to tune to an alternate channel to receive provisioning messages that enable the receiver to be tested). Note that Poli further teaches the use of in-band data (see Paragraph 0022).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the set-top box, as taught by Donlan, McKeown and Makofka, using the commands to force the set-top box/receiver to tune to another channel to receive provisioning messages, as taught by Poli, for the purpose of allowing for the offering of competitive products on a single cable network or cable system (see the bottom of Paragraph 0013 of Poli).

Referring to claim 39, see the rejection of claim 20.

Claim 40 corresponds to claim 39, where Poli further teaches that application software is transmitted in the in-band channel(s) (see Paragraph 0034).

### ***Conclusion***

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce  
Patent Examiner  
Art Unit 2614



March 7, 2006